

tant qu'on est malgré tout forcé de souffrir. Jugez d'après cela de ce que sont les nuits passées en plein air sur les bords du Pasvik, j'étais bien heureux de rencontrer en passant de pauvres cabanes éclairées par la cheminée seule; j'entrais à genoux dans ces réduits enfumés où j'avais au moins la satisfaction de reposer tranquillement à l'abri des insupportables diptères. Une exploration scientifique est assez méritoire dans les pareilles conditions."

[To be continued.]

XX.—*On some new Genera and Species of Parasitic and Fossorial Hymenoptera from the Khasia Hills, Assam.*
By P. CAMERON.

Ichneumonidæ.

JOPPINI.

IMERIA, gen. nov.

Head large, cubital, largely developed behind the eyes; the occiput roundly convex, its sides not distinctly margined. Eyes parallel; the malar space large. Clypeus not separated from the face, indistinctly foveate at the base. Mandibles large; their apex with two large, equal, widely separated, long, sharply pointed teeth. Scutellum longer than broad; its sides with large, narrow, leaf-like keels. Median segment areolated at the base; the sides of the apex sharply keeled, the middle of the keel with a blunt tooth; the spiracles elongate, curved, broadest at the base. Prosternum large, leaf-like below, with a distinct margin. Legs: the fore tarsi twisted at the base. Abdomen not much longer than the head and thorax united, with eight segments; the ventral fold on the second and third segments; the ovipositor largely projects. Areolet oblique, almost triangular. Antennæ dilated and compressed towards the apex.

Belongs to the Joppini and resembles somewhat the Neotropical genus *Ædicephalus*. It comes near *Xenojoppa*, Cam., *olim Margrettia*, Cam., from which it may be known by the hinder coxæ not being toothed, by the keels on the scutellum not being raised and leaf-like, by the face and clypeus forming one piece, by the petiole not being perceptibly thickened towards the apex, by its spiracles being

much smaller, rounder, and not nearly so elongated, and by the dorsal segments not being longitudinally striated. Characteristic is the fact that the longitudinal keels on the metanotum are obsolete, and, on the other hand, there are transverse ones, as in the *Cryptina*. The mandibles are peculiar; they are broad at the base, project largely downwards below the head, and appear as if they were attached by the upper part only and not by the whole width of the base.

The differences between *Imeria*, *Xenojoppa*, and *Habrojoppa* may be shown thus:—

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|--|-------------|
| A. Abdomen with seven dorsal segments, the mesonotum coarsely reticulated, mandibles and fore coxæ normal. | |
| Postpetiole widely dilated at the apex as in the <i>Platyuri</i> , clearly separated, the hinder coxæ toothed | XENOJOPPA. |
| Postpetiole not widely dilated, not clearly separated from the petiole, the hinder coxæ not toothed | HABROJOPPA. |
| B. Abdomen with eight dorsal segments. Mandibles very broad, thick, and developed straight downwards at the base; the fore coxæ large, globular, largely developed behind the base of the trochanters; the mesonotum not reticulated | IMERIA. |

Imeria albomaculata, sp. n.

Black, shining; a line, broad and oblique on the top, gradually narrowed towards the apex, on the inner, a somewhat oblong one on the outer orbits, not reaching to the bottom of the eyes, a mark, broadly, triangularly dilated on the outer side beneath, on the outer lower orbits, the clypeus except a small black mark in the middle above, the mandibles except the teeth, the palpi, the base of the pronotum, the yellow continued more narrowly to the end of the pleuræ, a short line on the sides in front of the tegulæ, tubercles, an irregular somewhat triangular mark on the lower side of the mesopleuræ, at the apex, the scutellum, post-scutellum, a large triangular mark on the side of the median segment before the spiracles, the apex of the median segment, following the outlines of the areæ, thus being somewhat triangular above, and laterally on the lower side continued into the spiracular area immediately over the coxæ, yellow. Wings hyaline, the stigma testaceous, the nervures darker. The four anterior legs rufo-fulvous, with their coxæ and trochanters white; the hinder coxæ black, their apical three fourths white above; the hinder trochanters and femora rufo-fulvous; the basal joint of the

trochanters yellow above, blackish on the inner side; the hinder knees, the apex of the tibiæ, and the trochanters black. The base of the petiole, of the second and third abdominal segments broadly, the apical two segments entirely, and the apices of the middle segments very narrowly, yellowish white. ♀.

Length 10 mm.

Hab. Khasia Hills. Coll. Rothney.

Antennæ as long as the body; the ninth to the fifteenth or sixteenth joints white; the scape strongly punctured and thickly covered with fuscous hair. Face closely, but not strongly, punctured. Mesonotum closely, uniformly, but not strongly rugosely punctured, and, especially at the sides, is thickly covered with short fuscous hair. Scutellum obscurely punctured and sparsely covered with long fuscous hair. Median segment closely and strongly rugose, more or less reticulated; its extreme base in the middle depressed, smooth; the supra-external area large, wider than long; on the outer side closely longitudinally striated, on the inner closely and coarsely aciculated, almost punctured; the spiracular area is aciculated.

Cyanojoppa * *cærulea*, sp. n.

Blue, the head, thorax, and legs thickly covered with white pubescence; the inner orbits, a small mark on the sides of the clypeus, a longish line on the outer orbits, a line on the apical two thirds of the pronotum, the outer side of the tegulæ, the tubercles, and a mark on the lower side of the mesopleuræ at the base, yellowish white; the wings fuscous violaceous, the nervures and stigma black; the apex of the four front femora and the four anterior tibiæ in front yellowish white. ♀.

Length 15 mm.

Hab. Khasia Hills. Coll. Rothney.

Head and thorax thickly covered with white pubescence, closely and distinctly punctured; the scutellum more sparsely punctured than the mesonotum, the postscutellum closely longitudinally striated. The lower half of the propleuræ is much more strongly punctured than the upper; the punctuation almost forms reticulations. Metathorax closely and strongly punctured; the base is more sparsely punctured than the rest; the arcola is widely separated from the base; it is slightly longer than broad, open at the base, and slightly narrower there than it is at the apex; its sides are

* *Cyanojoppa*, Cam. Zeits. f. Hymen. u. Dipt. 1902, p. 398.

roundly curved outwardly, its apex is roundly, but not much curved inwardly. The postpetiole is closely longitudinally striated; there may be two small white marks on its apex. The second and following segments are closely and somewhat strongly punctured; the base of the second is longitudinally striated; the gastrocœli are obscurely striated at the base.

Cyanojoppa albonotata, sp. n.

Blue, the head and thorax covered with white pubescence the inner orbits, the outer more narrowly in the middle, the sides of the clypeus, an irregular mark outside the middle, the maxillary palpi except at the base, a line on the pronotum, the tubercles, the apex and the apical half of the sides, and two small marks on the apex of the basal three segments of the abdomen, yellowish white; the wings fuscous violaceous, the nervures and stigma black. ♂.

Length 15 mm.

Hab. Khasia Hills. Coll. Rothney.

Head and thorax closely and somewhat strongly punctured; the apex of the propleuræ more or less striated; the apex of the postscutellum impunctate in the middle. The areola has the basal half somewhat more distinctly narrowed than the apical; its sides are foveate, the central part irregularly shagreened; the posterior median area distinctly projects triangularly into it and is closely rugosely punctured; the spiracular area, except at the base, is coarsely irregularly reticulated. Postpetiole finely and closely striated at the base, the apex almost smooth. The second and following segments have a distinct purple tint; the second, third, and fourth are closely and rather strongly punctured, the second in the middle at the base is strongly longitudinally striated; the gastrocœli have a few stout keels at the base. Legs coloured like the body; the four front coxæ, femora, and tibiæ are more or less yellowish beneath.

Cyanojoppa striata, sp. n.

Black; the abdomen blue, marked with purple; the head and thorax thickly covered with white pubescence; the inner eye-orbits, the base of the clypeus at the sides, a mark on the base of the mandibles, a narrow line on the edge of the pronotum, the scutellar keels, the tubercles, and a small mark on the base of the mesopleuræ, white; the basal half of the hinder femora red; the wings almost hyaline, the nervures and stigma black. ♂.

Length 15 mm.

Hab. Khasia Hills. Coll. Rothney.

Face strongly and closely, the clypeus still more strongly, punctured; the front and vertex strongly punctured, except between the eyes and the hinder ocelli; the front in the middle obscurely transversely striated. Mesonotum closely punctured, the parapsidal furrows indicated at the base; the scutellum as closely but not so strongly punctured; the postscutellum closely punctured at the base. Metanotum closely and distinctly punctured; the posterior median area more or less transversely striated; the lateral areae obliquely striated, the basal one finely and closely, the apical more strongly and with the striæ distinct and clearly separated; the spiracular area is closely and weakly striated behind the spiracles, its middle closely and strongly obliquely, its apex more strongly and irregularly. Pleuræ closely and strongly punctured, the propleuræ more strongly than the rest and striated in the middle at the apex. The four front tibiæ and femora may be more or less obscure yellow in front. The base of the petiole is smooth above and has its sides keeled; the middle is stoutly and irregularly and the apex more closely and finely striated. The second segment has the basal half stoutly and closely longitudinally striated; the gastrocæli are stoutly striated in the centre. The tarsal spines are blackish. The areola is small, broader than long, separated from the basal slope by a narrow keel; it is shining and is irregularly striated, the striæ being more or less broken and irregular; it becomes gradually and slightly wider from the base to the apex; the basal slope is closely and finely transversely striated.

This species comes nearest to *C. rufofemorata*, Cam.; but that species may be known from it by the hinder femora being entirely red, by the areola being not separated behind by a keel, and by its being closely reticulated or irregularly punctured throughout, and by the lateral areae being closely punctured and reticulated, not distinctly striated throughout as in the present species. *C. nigrocærulea* and *C. cæruleo-caudis* may be known from it by the much larger areola. The median segment is more strongly striated than it is in the other species. In some examples there are two white marks on the apex of the scutellum. The wings may be hyaline or distinctly fuscous throughout.

Aglaojoppa * *flavolineata*, sp. n.

Black, smooth, and shining; the face, orbits, clypeus, labrum, base of mandibles, palpi, two long lines on the

* *Aglaojoppa*, Cam. Ann. & Mag. Nat. Hist. ser. 7, vol. vii. p. 381.

mesonotum, the scutellum, a mark on the base of the scutellar keels, the postscutellum, a small mark behind the spiracles, the outer apical area extending at the apex on to the spiracular, a broad band on the pronotum, a smaller line on the lower side of the propleuræ, the lower half of the mesopleuræ except at the base and apex, the mesosternum, the tubercles, and a mark under the hinder wings, lemon-yellow. The four anterior legs lemon-yellow, except the femora above and an interrupted line on the tibiæ; the hinder coxæ, femora, and apical third of the tibiæ black. The apex of the petiole, a large mark on the sides of the second, third, fourth, and fifth segments at the apex, lemon-yellow; the marks on the second larger, on the fifth much smaller than on the others. Wings violaceous fuscous, paler at the base; the stigma and nervures black. ♂.

Length 15 mm.

Hab. Khasia Hills. Coll. Rothney.

The scape and the basal third of the flagellum yellowish fulvous beneath. Face and clypeus sparsely punctured, the sides and apex of the clypeus smooth. Mesonotum covered with large, rather widely separated punctures and with rather long fuscous hair; the scutellum with longer and somewhat paler hair. Areola twice broader than long; its basal keel semicircular and not so clearly defined as the others; the posterior median area coarsely punctured, except at the extreme base; all the punctures are deep and distinctly defined. Pro- and mesopleuræ with shallow punctures; the apex of the propleuræ coarsely, deeply, and irregularly punctured, of the mesopleuræ crenulated, the lower part with a small upper and a much larger lower fovea. Petiole smooth, neither punctured nor striated. Gastrocœli large, deep, their base with five diverging striæ; the space between them closely striated; the second to fifth segments are closely punctured.

Aglaojoppa femorata, sp. n.

Comes near to *A. flavomaculata*, but the yellow markings are much less extensive (there are only four on the abdomen), the mark on the mesopleuræ is much smaller, the two marks on the mesonotum are shorter, and the areola is more clearly defined.

Black, shining; the scape of antennæ below, the face, clypeus, labrum, base of mandibles, the palpi, the inner orbits, the lower two-thirds of the outer more broadly, the edge of the pronotum broadly except at the apex, two short

marks on the middle of the mesonotum, scutellum, post-scutellum, the greater part of the lateral areae of the metanotum, the lower part of the propleuræ, the tubercles, a large mark, slightly longer than broad, on the mesopleuræ on the lower side near the base, a small mark on the metapleuræ under the wings, and a larger irregularly oval mark on their centre, lemon-yellow. Wings uniformly fuscous violaceous; the stigma and nervures black. Legs lemon-yellow; the four anterior femora broadly, the fore tibiæ behind throughout, the middle and hinder pair at the base behind, the basal half of the hinder femora, and the basal joint of the hinder tarsi black at the base. Abdomen black; a mark obliquely narrowed behind on the apex of the petiole, and two larger marks on the apex of the second segment, lemon-yellow. ♂.

Length 15 mm.

Hab. Khasia Hills. Coll. Rothney.

The base of the median segment is smooth, its middle obliquely depressed; the areola is slightly longer than broad, and is gradually and slightly widened towards the apex; the posterior median area is closely, rugosely, transversely striated; the outer apical areae stoutly obliquely striated; the spiracular finely rugose at the base, its apex stoutly striated. The second and third abdominal segments are closely punctured and striated in the middle; the gastrocœli deep, obscurely striated at the base. Face and clypeus covered, but not closely, with large punctures and sparsely with short white hair; the clypeal foveæ large. Apex of propleuræ depressed, irregularly striated.

Aglaojoppa cæruleodorsata, sp. n.

Black; the face, inner orbits, clypeus, labrum, base of mandibles broadly, the inner orbits narrowly above, broadly below, the edge of the pronotum broadly, two short marks in the centre of the mesonotum, a mark on the sides of the scutellum, broad behind, narrowed to a point at the apex, postscutellum, a mark on the lower side of the propleuræ behind, a large mark reaching to near the apex and prolonged narrowly upwards at the base, the mesosternum in the middle, the tubercles, a small and a large mark immediately under the hind wings, a curved one immediately behind the spiracles, a large mark in front of them over the coxæ, the sides of the petiole broadly, its apex narrowly, and a mark on the abdominal segments 2 to 5 on the sides, these marks becoming successively smaller, yellow. The

second and following segments of the abdomen blue; the second segment in the middle strongly longitudinally striated. Wings fuscous, the stigma black. ♂.

Length 16 mm.

Hab. Khasia Hills. Coll. Rothney.

Antennæ stout, the scape white beneath. Face and clypeus punctured, sparsely covered with short hair; the labrum projecting, rounded at the apex, and fringed with long pale hair. Mesonotum strongly punctured, the punctures becoming smaller towards the apex; the scutellum more strongly punctured than it in the middle. Postscutellum impunctate. Base of median segment smooth, with only a few scattered punctures; the areola is wider than long, and is separated by its own length from the base of the segment; the posterior intermediate area is strongly transversely striated; the posterior median area is wide and is closely transversely striated; the other areas are closely rugosely punctured. Propleuræ obscurely striated behind, the mesopleuræ punctured, but not strongly; the metapleuræ more closely punctured and with a distinct keel on the lower side. Fore legs with the femora and tibiæ lined with black above, the middle femora lined with black to near the apex and all round at the base; the hinder femora black, except at apex; the metatarsus black, except at the apex; the base of the second joint narrowly black; the hind tibiæ black, broadly white at the base. The middle of the petiole is longitudinally striated. Areolet narrowed at the top, the nervures meeting there.

This species is not quite a typical *Aglaojoppa*; the areolet is more narrowed at the top; the colour is paler, it being almost white, and the blue abdomen also separates it from the other species.

*Acanthojoppa** *indica*, sp. n.

Luteous, marked with yellow; a black mark on the base of the mesonotum, a line along the base from the middle of the pronotum to the end of the tegulæ and the depression at the base of the scutellum yellow; the wings beyond the stigma fuscous, with a slight violaceous tint; the stigma dark testaceous. ♂.

Length 13 mm.

Hab. Khasia Hills. Coll. Rothney.

Basal half of the antennæ rufo-fulvous, the scape with a yellowish tinge on the lower side. The face and clypeus

* *Acanthojoppa*, Cam., 'The Entomologist,' 1899, p. 109.

yellow ; the face closely punctured, the clypeus covered with a pale pubescence ; the vertex closely punctured and thickly covered with short blackish pubescence. Mandibles pale yellow, the teeth black. Mesonotum dark rufous, a mark on the base, a line along the base from the middle of the pronotum to the end of the tegulæ, and the depression at the base of the scutellum, black. Scutellum paler, of a more yellowish tint than the mesonotum ; it is more distinctly and less closely punctured, and is covered all over with longish black hair ; its apex, on the top, has a shallow depression ; its sides are not keeled. Metanotum strongly and closely punctured ; its sides, base, and apex bordered with black ; the apical half of the posterior median area black : the areola is about as broad as long, its base is rounded, its apex transverse ; inside it is a stout central keel, not reaching to the base, and there is an oblique one on either side, the base is hollowed. The upper half of the propleuræ is closely punctured and striated obliquely on the lower side. Mesopleuræ closely and distinctly punctured ; the metapleuræ more strongly punctured, behind the keel stoutly striated ; the hair is long, close, and fuscous in colour. Legs coloured like the body ; the four anterior paler, more yellowish at the base. The wing-areolet is triangular, the nervures touching at the top ; the second transverse cubital nervure is widely bullated. The petiole is smoother and more shining than the rest of the body ; the gastrocœli narrow, smooth, and deep at the base.

Acanthojoppa lutea, sp. n.

Luteous, the apical half of the antennæ black, the basal pale yellow ; the wings fuscous hyaline, the apex violaceous, the stigma luteous, the nervures black. ♀.

Length 17-18 mm.

Hab. Khasia Hills. Coll. Rothney.

The basal seventeen joints of the antennæ are yellowish, darker coloured at the base. The inner eye-orbits and the sides of the clypeus broadly pale yellow. Face punctured, more strongly and closely in the middle than on the sides ; the base of the clypeus sparsely punctured. Mandibles pale yellow, their teeth black. Mesonotum darker coloured than the rest of the thorax, coarsely and closely shagreened and covered with a short, close, dark pile. Scutellum more distinctly and strongly punctured than the mesonotum ; its apex transverse in the middle, its sides projecting into blunt teeth. The base of the median segment irregularly rugose,

the lateral areae smooth at the base, the apex is stoutly transversely striated; the posterior median black, with the striæ closer and narrower; the areola is large, longer than broad, its apical half obliquely narrowed; the teeth are large and rounded at the apex. On the thorax the following parts are black: the base and sides of the median segment, the posterior median area, an oblique line below the middle of the propleuræ, the sides of the mesosternum at the base, and the pleuræ before the mesocoxæ. The wings have a distinct yellow tinge to the base of the stigma, the apex with a distinct fuscous-violaceous tint; the stigma luteous. Abdomen shining, the second and third segments closely punctured; the gastrocœli shallow, their outer side with a few obscure striæ.

The violaceous tint is much more distinct on the apex of the fore wings than in the other species, while the areola differs in being sharply narrowed on the apical half.

*Xanthojoppa** *nigrolineata*, sp. n.

Length 20 mm. ♂.

Hab. Khasia Hills. Coll. Rothney.

Yellow; the front and vertex broadly in the middle, the former more broadly than the latter and the occiput still more broadly, the sides and apex of the mesonotum broadly, the latter more narrowly than the sides, a broad band in its centre at the base and extending to shortly beyond the centre, the band dilated and rounded at the apex, the space at the base of the scutellum, including the foveæ, the depression at its sides, the base of the median segment, its apex with the teeth, the black band projecting in the middle, the middle of the propleuræ, the mesopleuræ round the top and at the apex, the base of the second abdominal segment, its apex narrowly and it has a faint central line, which is narrowed and faint at the base, the base of the petiole and the third and following segments broadly down the centre, black. Wings fuscous violaceous, the nervures and stigma black. Legs coloured like the body; the hinder tarsi, except at the extreme base and apex, black. The basal eight or nine joints of the antennæ are rufous, the others black or brownish; the scape yellow, almost smooth and sparsely covered with black hair. Face and clypeus smooth, shining, impunctate, and sparsely covered with white hair; the labrum fringed with golden hair. Mesonotum shining, closely, but not strongly, punctured and thickly covered with short fuscous

* *Xanthojoppa*, Cam. Ann. & Mag. Nat. Hist. ser. 7, vol. vii. p. 378.

hair. Scutellum punctured and thickly covered with fuscous hair. Postscutellum very smooth and shining, glabrous, deeply and widely foveate laterally. The central depression on the median segment is bordered behind by a short stout keel. The rest of the segment is coarsely rugosely punctured; the areola is open behind and is longer than broad; the posterior median and lateral apical areæ coarsely reticulated, longitudinally in the middle, more coarsely transversely at the sides; the teeth stout, black. Propleuræ above punctured. Mesopleuræ shining, the black upper part shagreened, more coarsely at the apex below, the upper part raised, the lower, next to the sternum, also projecting, but not so strongly. Metapleuræ strongly obliquely striated, less strongly at the base. Petiole smooth and shining, the apex triangularly dilated, the base of the second segment strongly longitudinally striated; the gastrocœli elongate, smooth on the outer side, the apex testaceous and separated from the rest by a stout transverse keel; the base of the petiole is stoutly keeled down the middle and less stoutly at the sides.

Xanthojoppa crassispina, sp. n.

Length 11-12 mm. ♀.

Hab. Khasia Hills. Coll. Rothney.

Very similar in form and coloration to *X. trilineata*, Cam. (Ann. & Mag. Nat. Hist. ser. 7, vol. vii. p. 378), but may be known from it by the form of the scutellum, which has the sides largely bordered by leaf-like expansions from the base to the apex, by the depression at the base being bordered laterally by a stout keel, by there being three areæ on the base of the median segment, and by the gastrocœli being stoutly longitudinally striolated.

Yellow, suffused with fulvous; the ocellar region, the vertex in the middle, the front broadly, a broad line on the middle of the mesonotum extending from the base to shortly beyond the middle, the sides near the tegulæ, the scutellar depression, the depression at the base of the median segment, the middle of the areola, the posterior median area entirely, the middle of the propleuræ, the base of the mesopleuræ and the upper part below the tubercles, a mark over the middle coxæ, and the base and lower side of the metapleuræ, black. Vertex finely punctured, the front very smooth and shining. The face and base of the clypeus with large shallow punctures. Apex of mandibles black, the base covered with soft white hair; before the apex on the lower side with golden hair. Mesonotum closely punctured, dull yellow, suffused at the

sides and middle with rufous. Scutellum roundly convex, large, its sides bordered by stout projecting keels, strongly punctured and covered with long black hair. The depressed base of the median segment is smooth and shining and is bordered at the top in the centre by a curved keel; the depression is wide, deep, and smooth. Postscutellum smooth, shining, and finely striated in the middle at the base; the depression bordered laterally by stout keels. Areola longer than broad, rounded at the base, transverse at the apex; its centre bears some stout irregular striæ. The posterior median area closely, transversely, rugosely punctured, the base with three or four short, stout, longitudinal keels; the sides stoutly transversely striated; the lateral teeth very large, broad, curved, and rounded at the apex. Legs fulvous; the coxæ and trochanters more or less yellow; the tarsi stoutly spined. Wings hyaline, with a distinct fulvous tinge; the stigma fulvous, the nervures darker. Petiole smooth and shining, except on the depressed sides of the apex, which are punctured, the second segment strongly, the others weakly punctured; the gastrocœli shallow, narrow, longish, strongly longitudinally striated. The apex of the petiole, the base and apex of the second and third segments narrowly, and the base of the apical segments more broadly, black; the sheaths of the ovipositor fulvous, black. The four anterior coxæ are, for the greater part, pale yellow; the posterior have the basal two thirds yellow above. Calcaria black. Gastrocœli stoutly irregularly striated.

Erythrojoppa * *lineata*, sp. n.

Ferrugineous; the ocellar region, two broad lines on the centre of the front, the antennæ from the fourteenth joint, a broad band shortly below the middle of the prothorax, the base and sides of the mesonotum and two lines in the centre on the apical half, the space at the sides of the scutellum, the base of the median segment narrowly, the posterior median area, the base, top, and apex of the mesopleuræ, and the base and lower side of the metapleuræ and the apex of the metanotum narrowly, black. Legs coloured like the body, the hinder tarsi black. Wings fuscous violaceous, highly iridescent, the nervures and stigma black. ♂.

Length 20 mm.

Hab. Khasia Hills. Coll. Rothney.

The face and plenræ have a faint, but distinct, yellowish tinge. The face and base of clypeus are sparsely punctured;

* *Erythrojoppa*, Cam. Ann. & Mag. Nat. Hist. ser. 7, vol. ix, p. 146.

the front has a few transverse striæ. Mesonotum closely and rather strongly punctured and thickly covered with short fuscous pubescence. The pyramidal scutellum is more sparsely punctured and is covered with long pale fuscous hair; on its sides are two or three longitudinal keels or striæ. The basal half of the postscutellum is closely longitudinally striated. Median segment closely and strongly punctured, except the areola, which is smooth and shining; the posterior median area is coarsely transversely striated, more regularly at the base than elsewhere; in the centre is a stout longitudinal keel. Mesopleuræ closely punctured, except on the apex above, where it is smooth. The spiracular area, behind the spiracles, coarsely obliquely striated; the metapleuræ strongly and closely punctured, the punctures running into striations. Abdomen uniformly coloured; the postpetiole obliquely stoutly striated in the middle; the segments are closely and uniformly punctured; the basal half of the second is stoutly, longitudinally, closely striated; the gastro-cæli smooth, with curved stout striæ on the basal half.

May be known from *E. ferruginea* by the abdomen being entirely ferruginous.

Lagenesta ferruginea, Cam.*

The male of this species agrees with the female in coloration. It has a long and narrow abdomen, as in *Erythrojoppa ferruginea*, with which species it agrees closely in form and coloration. It may be known easily from the latter by the flat, not pyramidal, scutellum. The antennæ are serrate.

[To be continued.]

XXI.—*Some Observations on British Freshwater Harpactids.*

By THOMAS SCOTT, F.L.S.

SINCE the publication of the Monograph of the free and semiparasitic Copepoda of the British Islands by Professor G. S. Brady—a work which gave a fresh impetus to the study of these interesting organisms and which is indispensable to those who desire to become familiar with the group—greater attention has been devoted to the examination of the freshwater forms, and a number of rare and, in some cases,

* Ann. & Mag. Nat. Hist. ser. 7, vol. vii. p. 377.